

# CITY OF BRANTFORD ONTARIO

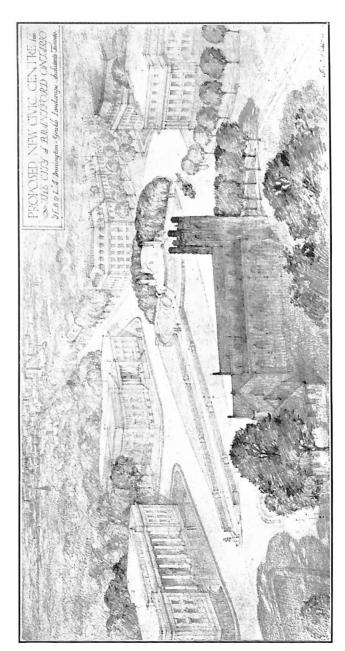
PRELIMINARY REPORT TO THE

PARKS COMMISSION

ON FUTURE DEVELOPMENT & IMPROVEMENT

A.B. & L.A. DUNINGTON-GRUBB LAINDSCAPE ARCHITECTS
TORONTO 1914.

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 View of proposed civic centre and Bell Telephone Memorial Park as seen from behind Grace Church.
 See Page 24 and Plan opposite Fage 24.

#### The Brantford Parks Commission, Brantford, Ontario.

Gentlemen:

It gives us much pleasure to be able to state that our preliminary report on the City Plan of Brantford is now complete and submitted herewith. In the preparation of this report it has been our aim to plan for the probable needs of the City of Brantford during the next fifty years. Consequently comparatively few of the proposals outlined in this report are suggested as improvements which it would be wise to execute in the immediate future. The necessity for most of them will only unfold itself with the further growth of the city.

In order to anticipate the argument that, when the necessity for improvements is not immediately apparent planning should be delayed until the need arises, we would point out that delay in these matters is too often fatal to their ultimate accomplishment.

Had a definite plan been prepared in the past to which all developments were to be referred, certain lands, which used to be City property, would never have been allowed to pass into private ownership; opportunities would have occurred for the acquisition of lands likely to be needed as parks in the future; building frontages on the traffic streets would not have been allowed to encroach beyond a definite line; and river banks would not have been delivered into the hands of railway corporations.

We are most anxious that the preliminary nature of our report and plan should not be lost sight of. The work of preparing an authoritative plan for a city like Brantford is one of very great magnitude. Such work should be undertaken only by a responsible commission which would be armed with power to thoroughly sift each proposal in detail. The work of such a commission would be permanent as the plan would always be subject to amendment and addition with the changing needs of the city.

Our proposals then must be regarded as merely tentative in character. The report opens up the possibilities of an authorative plan such as the one already referred to. While its general principles are the result of many months of thought and study, its details are by no means above local criticism.

We therefore trust that we may meet with forbearance rather than censure if errors in detail be discovered, and that our recommendations be criticised rather as means to an end than as an end in themselves.

Yours very truly,

H. B. & L. A. DUNINGTON-GRUBB

The Board of Park Management have pleasure in presenting Mr. Dunington-Grubb's suggestions for the improvement of Brantford in the hope that the City Council, City Officials, and Citizens generally may take a lively interest in the development of their growing city, along lines of true town planning; that full advantage may be taken of the natural beauty of its situation; that what is worthy may be conserved; that mistakes may be avoided; that the aim for the future may always be to make Brantford convenient, healthy, and beautiful.

#### Members of Board of Park Management

EDWARD L. GOOLD
Chairman.
FRANK COCKSHUTT
Chairman Grounds Committee.
GEORGE S. MATTHEWS
WILLIAM GLOVER
FRANKLIN GROBB
JNO. J. HAWKINS
Secretary.
JNO. H. SPENCE
Mayor.

December, 1914

# List of Illustrations

Illustra No.		Opposite Page
1.	Frontispiece. Perspective. Civic Centre	
	View over city from Terrace Hill.	
	The Market Square	
4.	Agricultural Park	16
5.	The Bell Homestead	16
6.	Street Sections	18
	Street Sections	
8.	Plan of Victoria Square	22
9.	Plan of Civic Centre	24
10.	Plan of Alexandra Square	26
11.	View over Waterworks Property	28
12.	Mohawk Park	28
13.	Grand River	30
14.	Grand River below T. H. & B. Bridge	30
15.	View of the canal west of Mohawk Park	32
16.	View of the Grand River above Holmedale Dam.	32
17.	Victoria Square	34
18.	Alexandra Square	34
19.	The Grand Trunk Railway Station	38
20.	Perspective view of proposed Bell	
	Telephone Memorial Gardens	42
21.	General Plan of the City	48

# Contents

		Page
1.	INTRODUCTION	
	The Need for Action	11
2.	EXISTING CONDITIONS	13
	(a) Physical Aspect	19
	Topographical	
	Development of Street Plan	
	Distribution of Residential and Industrial areas	
	Park Area compared with other cities	
	(b) Economic Aspect	
	Centre of large farming community	
	An industrial centre	15
3.	GENERAL PROPOSALS	17
	(a) Communication	17
	The street system	
	Main lines of communication	
	New arterial connections	
	Widening of existing thoroughfares	19
	Design of main thoroughfares and secondary streets	19
	The street railway	20
	The steam railways	21
	Bridges	21
	(b) The Park System	99
	(1) Parks	
	Victoria Square	
	Station Square	
	The proposed civic centre and monumental traffic Str	
	from G. T. R. Station to W. Brantford	
	Jubilee Terrace	
	Oxford Park	
	Alexandra Square	
	Agricultural Park	
	Waterworks Park	
	Bell Homestead Park	
	Ontario School for the Blind	27
	Mohawk Park	
	Other Parks	28

#### Contents—(continued)

The Park System—(continued)	
(2) Parkways	.28
The Grand River and the Canal	.28
Definite proposals for Parkways	.30
(3) Playgrounds and Recreation Centres	.33
Statistics	34
Tutela Park Playground	35
West Street Playground	35
Morrell Street Playground	35
St. Paul's Avenue Playground	35
(4) Shade Trees	
(c) The Market	37
(d) Housing	
(e) Methods of procedure	
Improvement Commission	43
Official Plan	
General Assessment	44
Special or local Assessment	44

#### 1. Introduction

Every citizen of Brantford realizes that from year to year certain changes are taking place in the physical and social aspect of the city. Traffic requirements are found from time to time to be insufficient to meet the needs of a growing population. Here it is a new bridge, there a subway, while on the growing fringe new buildings are continually arising. In the centre of the city some residential streets gradually become shopping thoroughfares while others give place to factories and warehouses.

Brantford, then, is now in a transitional stage, changing from the quiet country market town of yesterday into the highly organized commercial and manufacturing centre of tomorrow.

The following suggestions, while attempting to forecast the nature of future development which all anticipate to a greater or less extent, are offered as a proposal for the control of that development while the city still remains in the plastic stage, so that Brantford may, if possible, be spared in the future some measure of those irretrievable blunders which now hamper the progress of almost every modern city. Most large cities of to-day have problems to be faced in the future involving millions of dollars worth of public money, all of which could have been avoided had more foresight been exercised while the city was still in its transitional stage.

Every year we see new subdivisions placed in the market with the sole object of developing the greatest possible amount of frontage for the owner and squeezing as closely as possible to the minimum requirements laid down by inadequate and ill-considered legislation. New streets bearing no relation either in width or direction to the ultimate traffic requirements of a greater Brantford, receive the sanction of the city. How is it possible that streets laid out in the immediate vicinity of the river banks could serve to the best advantage new bridges, certain to be required in the very near future, when the sites for those bridges have not yet been determined or even considered? Thus, while criticising an earlier generation for its lack of foresight, we fail to observe problems piling up for a new decade to solve.

The universal interest in town planning activity now manifest throughout the civilized world, goes to show that this haphazard development must end, that the progressive city of the future, the city of health, happiness, and prosperity, is to be planned, like any other industrial enterprise, far in advance of its immediate requirements.

Town planning for future requirements does not involve the plunging of the city into vast financial expense burdening the ratepayers and permanently crippling civic finances. It does not involve some collosal house-cleaning in which manufacturers may become alarmed and in which local trade may be ruined.

Are we to believe that, because Brantford is a small city, she cannot go far wrong by following the lead of larger neighbours who have continued to "let well alone?" Brantford's very size creates her opportunity to set the pace for more congested municipalities, which, having already outgrown their plastic stage, are now unable to remedy the mistakes of the past.

## 2. Existing Conditions

#### (a) PHYSICAL ASPECTS

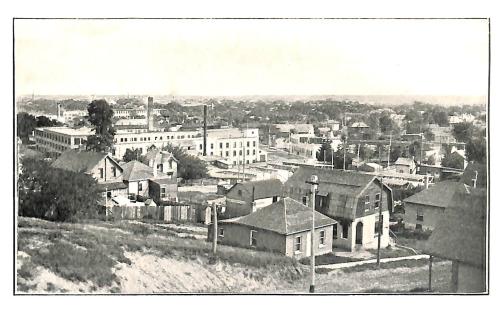
#### 1. Topographical.

Few cities enjoy so fine a natural setting as Brantford. The magnificent sweeps of the Grand River have here levelled out a wide plain surrounded on every side by a low range of hills shutting in the town like some range of fortifications. Both river and hills are inestimable assets to the citizens at large, intercepting the view at every turn with features of interest.

While the level area is sufficiently large to accommodate a business and manufacturing area of great size where transportation can be carried on at a minimum of expense, the higher levels constitute an admirable site for the large residential suburbs which will later be necessary to serve the city proper. While in the city itself all street vistas are closed by a hillside, every street on the upper levels should lead to a view over the city below. Both river and hills should be preserved and developed for future citizens in every possible way.

#### 2. Development of Street Plan.

While in many Canadian cities, notably Winnipeg, the original trails leading from the centre of the city out into the country have been almost entirely obliterated by the superimposition of a gigantic gridiron, wearying to the last degree in its hopeless monotony of unending vistas leading out into space, Brantford has well preserved her old country roads leading from the country on every side into the town. Quite apart from all questions of economical distribution of traffic with which we shall deal later, a glance at the map will show how full of interest is the street plan of Brantford. Few realize how much the pleasure and interest of life in the modern city depends upon the design and arrangement of its streets. In this respect Brantford is most fortunate. The fact that very few of her main avenues of traffic carry through for any great distance without some change in direction insures of itself lack of monotony, while the intersection of tributary streets at varying angles produces on every side pleasing irregularities in the way of interesting irregular blocks and triangular spaces which tend to rest the eye at every point. Quite apart, however, from artificially produced features of interest, the natural features of hill and river will for ever preserve Brantford's streets from monotony.



2. View over city from Terrace Hill. "Every street on the upper levels should lead to a view over the city below."

See Page 13.



3. Brantford's Market Square. Few cities can boast of so restrained and dignified a breathing space.

See Page 37.

#### 3. Distribution of Residential and Industrial Areas.

The well-organized city resolves itself into residential districts, industrial districts, commercial districts, and park systems. Upon the proper provision and distribution of these depend the physical health and prosperity of the entire city. In Brantford the conscious distribution of these various zones of civic life is already beginning to appear. The industrial area, so dependent upon adequate communication, confines itself almost entirely to the vicinity of one or more lines of railway. As the surrounding belt of hills tends to keep the railways down toward river levels, the manufacturing enterprises in a general way tend to keep to the lowest levels. Industrial development has, up to the present, largely confined itself to the eastern and southern sections of the city, and on these extensive flats their development should be en-As mentioned couraged by every means in the city's power. above there is already a tendency, as the lower flats become taken up for industrial and commercial purposes, for the residential districts to migrate to the upper levels both north-east and west, and this tendency should be encouraged. While the working class districts tend to spread towards the east and north in order to be near their work, the residences of the middle and well to do class shew an inclination to take advantage of the fine air and magnificent views available on the hills to the west and south.

#### 4. The Park Area Compared with other Cities.

CITY	Approximate Population	Park Acreage	Population per Park Acre	Maintenance per Annum	Maintenance per Acre	Mainten- ance per Capita
Winnipeg	207,000	577	359	18,000	31.19	.86
Vancouver	114,220	1253	91	77,000	61.45	.67
Hamilton	100,000	350	281	37,000	105.71	.37
Calgary	93,000	719	129	98,056	136.38	1.06
Des Moines	86,368	700	123	57,585	81.98	.69
Edmonton	75,000	1000	75	45,000	45.00	.60
Harrisburg	64,186	749	85	27,985	37.36	.44
Saint John	60,000	586	102	10,750	18.34	.18
Regina	50,000	257	194			
San Diego	39,578	1680	23	26,000	14.47	.65
Brantford	26,454	62 1/10	426	6,000	96.60	.22
Fort William	25,000	251/2	980	12,000	470.58	.48
Port Arthur	18,025	452	39	8,500	18.80	.48
Saulte Ste.						
Marie	13,006	58	224			
Lethbridge	10,000	344	29	25,000	72.67	2.50

The above table compares Brantford's Park Area, Population, and Annual Park Maintenance with that of other cities.

While the population per park acre is undoubtedly high it must be remembered that neither the grounds of the Ontario Schools for the Blind, nor the Waterworks Property, are included, though both are used to a considerable extent as public parks. Perhaps the most prominent feature of all, however, is the low cost of Park maintenance in Brantford when compared with other cities. While this may indicate, in some cases, a less intensive type of Park development in Brantford than that arrived at by some of her sister cities, it certainly shows, in large measure, admirable efficiency in management by the Parks Commission.

#### (b) ECONOMIC ASPECTS

#### 1. The Centre of a Large Farming Community.

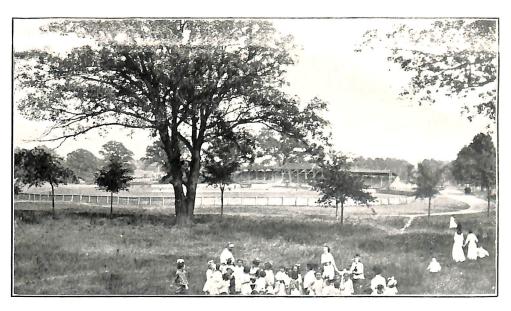
One of Brantford's greatest assets is the belt of Agricultural land with which it is surrounded. Situated as it is, in the very heart of one of the finest farming sections in Ontario, we have all the essential features of the self supporting community. At no time should this all important fact be lost sight of. By means of better intercommunication between city and country, together with the development of better marketing facilities of farm produce, every possible encouragement should be given to close commercial intercourse between the city dweller and the producer of food stuffs. We have no hesitation in saying that much of the marvellous development of German cities in recent years has been due to this recognition of the necessity of encouraging on the outskirts an intensive farming community.

#### 2. An Industrial Centre.

In the selection of a site for his new plant the manufacturer has the following necessities in view:—1st, Cheap and efficient transportation either by rail, water, or both. 2nd, An extensive and cheap labour market. 3rd, Cheap power. 4th, Cheap land and low taxation.

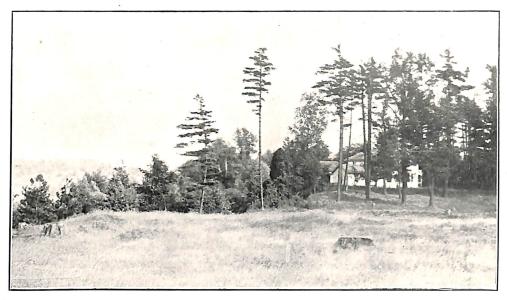
The development of Brantford's industries has in the past been steady, and although this development seems likely to continue, the speed at which it is destined to increase can be largely controlled by the action of the city in the immediate future. The commercial prosperity of cities depends to so large an extent upon the number and size of its industries, that no "inducements" seem to have been too great a sacrifice on the part of some cities, when bidding for the establishment of industrial concerns within their gates. So far, however, from having to truckle to manufacturing corporations, the well organized and well planned city will offer such outstanding advantages that it will be able to dictate its own terms and control its industrial section as a well organized unit.

As regards transportation, Brantford is already well served, and is likely to be better served in the future by the addition of two more Railway Companies. The centralization and economical distribution of these freightage facilities is a matter which requires much study for its solution before the problem becomes more entangled as seems probable at the moment. Another point on which Brantford has something to learn from Europe is the



4. A view in Agricultural Park. "The space is not sufficiently large for the purposes for which it is now in use."

See Page 26.



5. The Bell Homestead. "As the interest is largely historic, every effort should be made to preserve intact all the surroundings which commemorate the invention of the telephone."

See Page 27.

question of transportation by water. German cities stop at no expense in order to encourage commerce by cheap water transportation. In Toronto this matter is at last receiving considertion by the appointment of the Harbour Commission. The possibility of the rejuvenation of Brantford's obsolete canal connecting with Lake Erie needs thorough investigation.

It is probably in the development of her labour market, however, that Brantford can do most in the way of offering inducements to industries. Cheap foodstuffs, the housing of the working classes in modern sanitary homes, at low rentals amid beautiful congenial surroundings, and above all, the development of the city as a whole along lines of comfort, beauty, and convenience, will do far more in the way of offering "inducements" than any of the methods now in vogue. About these matters we shall have more to say hereafter.

## 3. General Proposals

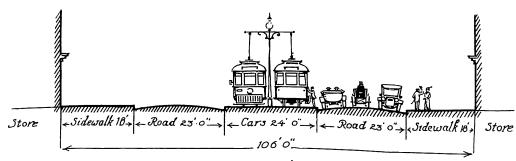
#### (a) COMMUNICATION

#### 1. The Street System.

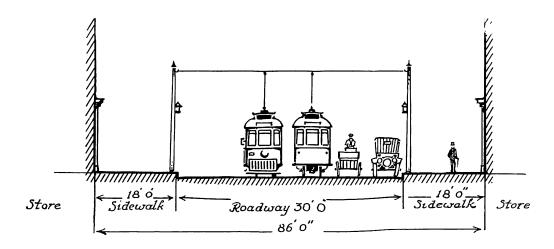
The planning of cities, like the planning of any other human utility such as the house in which we live, or the chair on which we sit, must be based upon accepted laws of design if it is to achieve any measure of success. These laws dictate that good design must express some definite purpose and must meet some specific human need. In the planning of a town the first specific human need demands that people shall be able to move quickly and directly from certain given points in the city to certain other Your plan may have an attractive appearance on paper, it may provide fine civic centres, parks and parkways, but if it does not fulfil the demands of traffic requirements it is doomed Undoubtedly the ease and convenience with which a city may carry on all its activities depends far more upon the design of its street system than upon any other feature. No part of a city's equipment has ever been so difficult to remodel when a growing population proved traffic requirements inadequate. In these days of democracy we have no Nero to burn the city down when legal entanglements interfere with his replanning scheme.

When we consider that the street system of a city represents by far the largest investment controlled by the Council, representing something like one quarter of the total area involved, that the largest share of the taxpayer's money goes towards street construction and maintenance, does it not seem strange that the planning of additions to the street system should be left so often entirely to men who, wholly without training themselves in such matters, have seldom the interest of the city at heart?

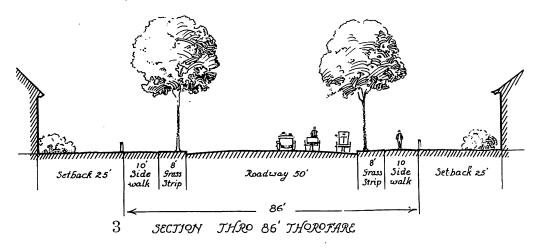
The most serious criticism which can be brought against Brantford's street plan is the total failure on the part of designers to recognize the fact that 15 or 20 per cent. of the streets are bound to carry 80 or 90 per cent. of the traffic. It obviously needs neither figures nor argument to prove what economies could be effected by good planning, if 50 per cent. of the streets were consciously planned with a view to preventing through traffic so that their roadways could be reduced to a minimum width of 18 or 20 feet.



1 SECTION THRO 106 TRAFFIC STREET



### 2 SECTION THRO 86:0" TRAFFIC STREET.



6. Proposed Street Sections for future development of Brantford. See Page 19.

#### 2. Main Lines of Communication.

Earlier on in our report we have noticed the fact that the original roads radiating from the town out into the country have been well preserved. Thus to the East we have the great Hamilton Road; to the North, Stanley, West Street, and St. Paul's Ave.; to the West, the Paris Road; to the South-West the Burford Road; to the South, Mount Pleasant Road; and to the South-East, the Cockshutt Road. These great thoroughfares supplemented by tributary radial arteries constitute a magnificent framework on which to build a fine street plan. It will be readily seen that for through traffic the Hamilton Road and Colborne St. connect with Brant Avenue, and the Paris Road with the Burford Road on the West; West and Market Streets coming in from the North connect with the continuation of Market Street and Cockshutt Road Thus we see that the focal point and great traffic on the South. centre of the city is at the crossing of Colborne Street with Market Street, and here it seems likely to remain. Another important through traffic thoroughfare is West Street from the Grand Trunk Station down Bridge Street to West Brantford. With the development of West Brantford, this through traffic will continually increase so that the preservation and development of Bridge Street is of prime importance.

#### 3. New Arterial Connections.

Thus we see the great main arteries of Brantford traffic picked out in simplest form comprising a skeleton plan. obvious that all traffic will not radiate from the centre to the suburbs, indeed the skilful planner will endeavour to divert through traffic away from the centre in order to avoid For this purpose traffic streets more or less congestion. circumferential in character will be needed and these with a few necessary connections have been picked out on plan. Mentioning only a few of the more important of these streets we have Murray and Clarence Streets giving through cross town connections from North to South. Both these streets should be continued across the canal, connecting by way of Eagle Avenue and Cayuga Street, respectively, with a bridge across the river proposed at the foot of Strathcona Avenue. From here connecting with a continuation of Grant Street, connection could be made by means of another bridge, certain to be needed in the future, with St. Paul's Avenue completing the circuit by way of Terrace Hill Street, a natural important cross town thoroughfare which certainly should be widened and opened up on the South side at certain points so that views may be had over the city. Mohawk Road, West Mill Street, and Dufferin Avenue, all important radial thoroughfares, should be continued across the river as shown on plan. 18

#### 4. Widening of Existing Thoroughares.

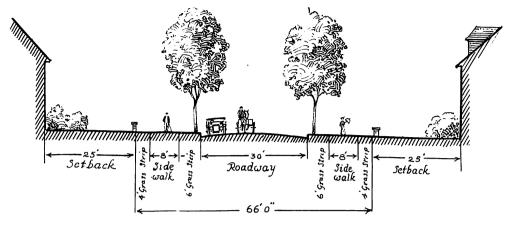
As has been already stated above, twenty per cent. of the streets in any city are bound, owing to their direction, terminal connections, or grades, to carry 80 per cent. of the traffic. iron by-laws restricting all streets to a width of 66 feet err as much on the side of extravagance, on the one hand, as they do on the side of false economy on the other. Enough has been said to shew that the main traffic arteries discussed above must be wider than 66 feet if they are to fulfil their purpose in the future. The example of Yonge Street in Toronto is sufficient to show that in built-up sections, the widening of thoroughfares is an impos-After talking of the widening of Yonge Street for sible task. some 25 years the most feasible scheme for making the best of a bad job has been the creation of parallel competing thorougfares. Although Brantford has not yet found her streets too narrow, the time is coming when this will be the case and the question of widening those thoroughfares where action is still should be taken up without delay.

The principal item of cost in the widening of thoroughfares consists in the value of buildings already built up to the frontage. Owing to the habit in English speaking countries of setting back residences a certain number of feet from the frontage, ranging from 10 to 25, an opportunity becomes available to widen streets at little or no expense if action be taken while the street is still used for residential purposes. As the street comes to be used in course of time for shopping purposes the buildings advance to the sidewalk as they are unable individually to bring the sidewalk Thus is lost for ever the opportunity of widening. to their doors. If the city, however, were to expropriate the strip between the frontage and the buildings, assessing back the cost against the new frontage over a number of years, the purpose from the point of view of the owners would be served just as well and the city would have secured its wider street.

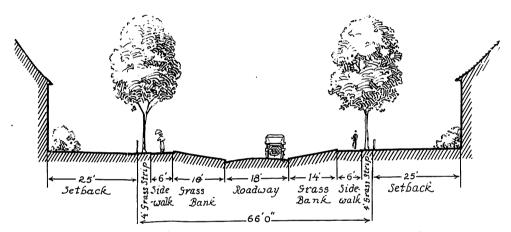
#### 5. Design of Main Thoroughfares and Secondary Streets.

As shown by street sections Sketch No. 1, Illustration No. 6, main traffic streets, such as the Hamilton Road with separate right of way for two lines of cars, should not be less than 106 feet wide. This allows but a minimum width of roadways on either side for three lines of traffic, comprising one vehicle standing at curb, one line of slow moving traffic, and one line of fast traffic.

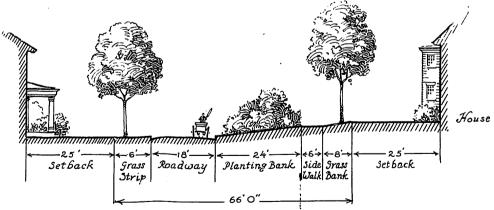
For secondary traffic, streets such as Murray and Chatham, 86 feet may be considered the minimum width. Sketch No. 2, Illustration No. 6 shows the development of such streets with cars and



4 SECTION THRO 66 THOROFARE .



5 SECTION THRO 66' RESIDENTIAL NON TRAFFIC STREET &



6 SECTION THRO 66 RESIDENTIAL NON TRAFFIC STREET -

7. Proposed Street Sections for the future development of Brantford.

See Page 20

shops while Sketch No. 3, Illustration No. 6 shows an 86 feet residence-street. It will thus be seen that for a business street with cars a roadway 50 feet wide permits of only two lines of vehicles on each side, passing clear of the car tracks.

Sketch No. 4, Illustration No. 7 shows a third class thoroughfare, 66 feet wide with 30 feet roadway and residences set back 25 feet.

Methods of dealing with non-traffic residence-streets are shown in Sketches Nos. 5 and 6, Illustration No. 7. In these cases the roadway is shown only 18 feet wide and very wide parking strips. In one case the street is shown with only one sidewalk. Roadways as narrow as 18 feet are only suitable for very short streets as vehicles have not sufficient room to turn around.

The question of the planting of trees on streets will be dealt with later.

#### 6. The Street Railway.

Now that the Brantford Street Railway has come into possession of the city, definite steps should be taken to think out at once a system of street railway development likely to be required in the future. This work requires the co-operation of the street railway expert with the city planner. The street railway system will follow quite closely the main lines of street traffic shown on plan. It may be taken for granted that every important thoroughfare will ultimately have a line of cars running on it.

All main radial thoroughfares should be wide enough to allow of a separate reservation for the cars with roadway on either side. Two objects are accomplished by this method. First, a much more economical roadbed for the cars.\* Second, the possibility of a much faster schedule, a most important consideration on routes between the centre and the suburbs. Wherever possible car routes should carry through the city from one side to the other in order to prevent congestion at the centre. Thus from the north, cars approaching the city from West Street would cross the city by Market Street and continue South along the Cockshutt Road. Colborne Street cars would carry through to Paris Road while a line of cars, having the Grand Trunk Station as a terminus, would serve by way of West, Bridge, and Oxford Streets, the Mount Pleasant and Burford Roads.

<sup>\*</sup>It has frequently been found that the saving in cost of roadbed in turf instead of concrete has been enough to offset the cost of widening the street sufficiently to allow of a separate reservation.

#### 7. The Steam Railways.

Unless some steps are taken to harmonize the various railway systems operating in Brantford a difficult railway problem is bound to arise sooner or later. It would be hard to think out any arrangement by which the lines entering the city from the South-West could be made to interfere more effectively with the natural street traffic of West Brantford. Neither of these lines. viz: the G. T. R. and the T. H. & B. should have been permitted to cross the Burford Road. They should have followed along to the South of it, crossing the Mount Pleasant Road just above its junction with Oxford Street and then, joining up with the L. E. & N., all three railways should have crossed the river on one bridge headed for the foot of Market Street where a Union Station would From here on the T. H. & B. would have been possible. have kept its present route, but the L.E.& N. should have followed the route of the G. T. R. with the exception that both railways should have followed up the centre of the block immediately to the west of Clarence Street instead of up the street itself. The L. E. & N. swinging round to the west could then have parallelled the main line of the G. T. by widening the cut below the Paris Road and joined its present right of way west of the golf links. Had such a scheme been adopted many of the problems with which Brantford is now confronted would have been avoided.

When the C. N. R. decides to build its line through Brantford the whole question of economical distribution of the railway system should be seriously taken up. It is certain that a few changes in the present route of some of the lines would save vast sums of money if the cost were balanced off against the constructof a large number of subways.

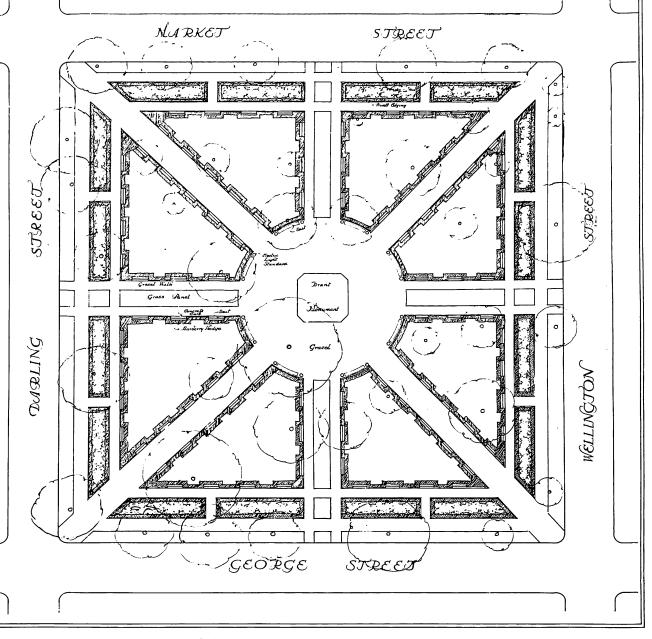
#### 8. Bridges.

As stated earlier on in the report a number of new bridges across the Grand River are bound to be needed in the comparatively near future. At the present time the only traffic connection across the river is Lorne Bridge which itself is far too narrow for even present requirements. A new bridge should be constructed at the foot of Strathcona Avenue as several important traffic streets can be made to converge on this point from both East and West. Kerby Island can be made use of for another bridge, bound to be needed in the future, connecting St. Paul's Avenue with West Brantford.

Another very important bridge, likely to be required at once, is a new connection from the foot of Clarence to Newport Streets giving direct access to the factories lying across the canal, while other bridges, giving more distant connections, are suggested on plan.

# DESIGN RELAY OUT OF VICTORIA PARK BRANTFORD ONT

Il B.& I: (l'I unington Grubb Landscupe Clochts. Toronte



Design for layout of Victoria Square.
 See Page 23.

#### (b) THE PARK SYSTEM

Some surprise may be felt that, in this report, the question of parks has not taken precedence over all other considerations. As the report itself owes its conception to the enthusiasm of the Park's Commission, the question might very naturally arise as to whether a park system is not the most important issue in any scheme of civic betterment. While nothing is more important from the point of view of health, cities, like buildings, must be developed first on lines of economy and efficiency, and secondly upon lines of beauty. When the plan fulfills its purpose the process of beautification, already half completed, proceeds so naturally and so logically that one wonders wherein lie the difficulties. In good city planning then the traffic system and the park system take the place of first and second fiddles. While the traffic system must connect with and serve the park system, the two must never compete. Both must fit in together serving their own particular functions.

Parks may be roughly sub-divided in the following manner:

- (1) City Squares will be strictly formal and architectural in character according to the type of buildings which surround them.
- (2) Suburban Squares will be gardenesque in their treatment, being developed chiefly with trees, shrubbery, grass, and flowers.
- (3) City Parks form the breathing spaces in the heart of a city. Here is found rest and quietness to which one may turn in moments of leisure from the bustle of the streets. City parks, like squares, must be definitely designed with a view to serving the purposes for which they are intended. Broad walks and drives, with mown lawns, shrubbery and water, are the materials with which the designer has to work.
- (4) Parkways may be described as very long thin strips of park. Their purpose is to provide a pleasant means of progress from one place to another, often from one park to another.
- (5) Park Reservations usually comprise considerable tracts of land on the outskirts of a city. Here are preserved for the citizens, within easy reach, the natural woodlands of the open country.
- (6) Playgrounds should be distributed throughout the city in such a manner that one at least comes within easy walking distance of every home.

Brantford's park system will now be discussed in detail.

#### 1. PARKS.

#### (a) Victoria Square.

Victoria Square is the only typically developed city square at present possessed by Brantford. Recognition has been given here to the necessity of a development in keeping with the importance of the site. The admirable monument to Brant is well placed in the centre and in excellent keeping with the really fine buildings surrounding the square. The lay-out as a whole serves its purpose, recognizing the demand at this point for much diagonal traffic.

Illustration No. 8 shows proposals for the further lay-out and development of this park. In this the existing layout has been strictly adhered to, but developed. A large open space surrounds the monument. Wide walks open up vistas for surrounding traffic.

The number of people using this park is so great that if the grass is to be kept up in first class condition, the public should be kept entirely to the walks. For this reason it is suggested that all walks be bounded by a concrete curb and that all grass panels be surrounded by a low hedge. The hedges if kept well trimmed would give a very finished appearance to the whole park. plan also provides for the removal of nearly half of the existing The trees in this square are altogether too thick from every standpoint. In a city square of this sort trees should be used with much caution. In the summer the square represents nothing so much as a section of primeval forest in the heart of the The monument itself is all but invisible from any of the surrounding streets while the feeling of openness and breadth with views of surrounding architecture is totally obliterated. addition to this, the few really fine trees, which should be preserved at all costs for the sake of shade, are now being seriously damaged by a thick growth of worthless saplings. If these trees are ever to be worthy of the site they must be given light, space, and air.

#### (b) Station Square.

The photograph of the existing surroundings of the Grand Trunk Station Illustration No. 19 will be sufficient to show the absolute necessity for a layout at this strategic point in keeping with the dignity of the city. Our proposals are set forth in Ill. No. 9. They comprise the closing of West Street by a circular park forming a concourse and turning-point for traffic approaching and leaving the station. While closing West Street at this

point, it is proposed to connect Market Street with the continuation of West Street by means of a subway under the railway. The scheme involves the purchase of the small triangular block bounded by Grey, West, and Market Streets.

#### (c) Civic Centre.

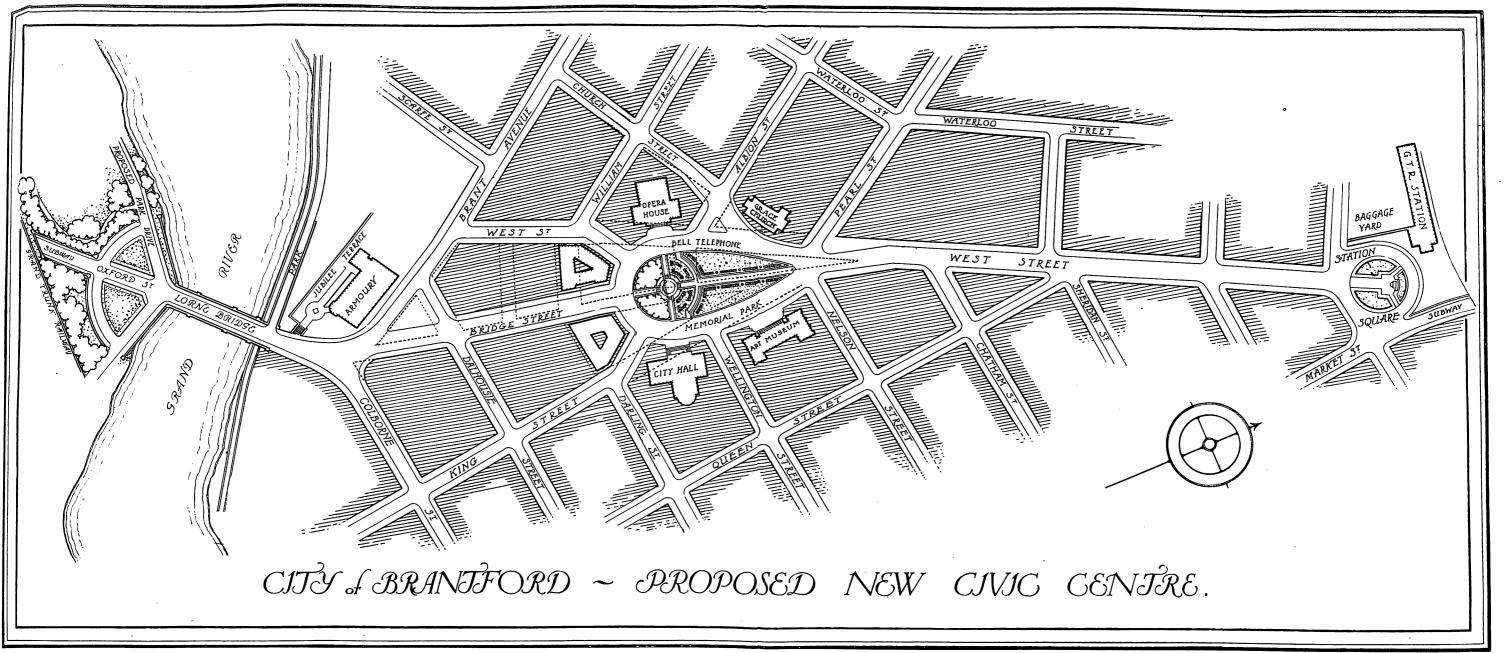
Earlier in the report the need has been pointed out for the development of a strong traffic connection between the Grand Trunk Station and West Brantford. Many factors point out West and Bridge Streets as the underlying axis of any central scheme of Civic development and adornment which may be contemplated in the future.

Some of the advantages of such a scheme may be enumerated as follows:

- (1) With the exception of the Opera House there are no really important buildings involved.
  - (2) The land involved is comparatively cheap.
- (3) The scheme would not only provide a much needed avenue of traffic, but would also link up some of the most important civic features in Brantford, including the Grand Trunk Station, The Bell Telephone Memorial Park, Jubilee Terrace, Lorne Bridge over the Grand River, and Oxford Park.
- (4) By the diversion of West and King Streets as shown on plan, a park nearly 500 feet long is immediately secured, forming an adequate setting for the Bell Telephone Memorial Monument. The present proposed setting is quite out of scale with the dimensions of the monument.
- (5) The location provides for the grouping, on ample sites, of six public or semi-public buildings including Grace Church round the Bell Memorial Park and Monument.

Regarding cost the assessed valuation of the blocks bounded by West, Wellington, King and Darling Streets is, including both land and buildings, \$40,000. These blocks, having an area of 67,800 feet, give us a unit cost of approximately 60 cents per square foot.

In addition to these blocks, it is proposed that the city should expropriate all the frontage on King Street between Darling and Nelson Streets, 200 feet deep, giving a total area of 104,000 square feet, which at the same price would cost \$62,400.



9. Design for a Civic Centre and Bell Telephone Memorial Park.

See Page 24 and Frontispiece

The block bounded by West, William, Church and Albion Streets has an area of 41,650 square feet, costing \$25,000, while 40 feet off the west side of Bridge Street gives an area of 14,850 square feet, costing \$8,910. The total land involved then amounts to no less than 228,250 square feet, which at 60 cents would cost approximately \$136,950.

After the readjustment including the site proposed for the City Hall, the city of Brantford would have for sale 220,050 square feet, which if sold at no more than the present assessed valuation would fetch \$132,030, leaving a deficit of \$4,920. In addition to this, it must be remembered that the city is acquiring a Park site of 64,700 square feet, a very valuable asset.

Quite apart from all questions of the erection of handsome buildings on the proposed site, it must be borne in mind that the Bell Telephone Memorial Monument is already assured, and the development of a park around it is a necessity. As this of itself will very greatly enhance the value of surrounding property, the city would be assured of a handsome profit on the deal.

#### (d) Jubilee Terrace.

Jubilee Terrace offers opportunities for civic beautification such as are possessed by few municipalities. The possibilities at this point have already been grasped and much has been done. The time is soon coming, however, when a much larger scheme will have to be contemplated, retaining the terrace by a handsome wall surmounted by a suitable parapet.

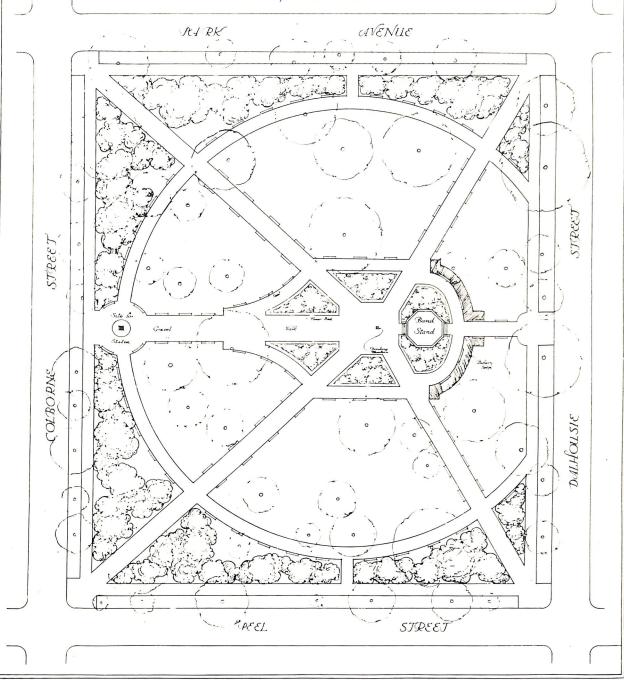
If it is finally decided to locate the L. E. & N. Station at the foot of Church Street the necessity for immediate construction of a riverside drive below the terrace would present itself, adding very much to the value and effect of the whole layout. Sooner or later this will have to be done in any case, as connection between Lorne Bridge and the riverside parks property will be essential.

#### (e) Oxford Park.

As a termination for the proposed traffic route, between the Grand Trunk Station and West Brantford, a small city square is proposed at the southern approach to Lorne Bridge. This starting point for two riverside drives leading East and West on the southern bank of the stream, should receive considerable development. The proposals for its treatment are shown on the plan.

# DESIGN & LAY OUT & ULEXUNDRA PARK BRANTFORD ONT:

HBELA Quington Grubb Landscape (Irchls Toronto



10. Design for layout of Alexandra Square. See Page 26.

#### (f) Alexandra Square.

Like Victoria Square, Alexandra Square contains far too many trees. Unlike Victoria Square, the layout is purposeless and wholly unsuited to the site. Illustration No. 10 shows proposals for the layout and development of this city park. The treatment should be less formal than that for Victoria Park. A bandstand has been suggested as a central feature while diagonal walks for foot traffic are most essential. The boundary planting of shrubbery will tend to give the whole layout a feeling of picturesqueness and informality.

#### (g) Agricultural Park.

The use to which Agricultural Park should be put is, in our opinion, that of a combined Park and Recreation Centre. space is not sufficiently large for the purposes for which it is now in use. The trotting track, together with the grand stands and ball field, take up so much of the area that the land is practically of no use for Park purposes. A better scheme would be to remove the running track and ball field to the Waterworks Park where abundance of room is to be found for both. The grand stand is, in any case, exceedingly badly placed, ruining the property for park purposes. With the removal of the trotting track and ball field the area could be planned out and developed as a supervised recreation centre with a small practice field for baseball, running track, and outdoor gymnasia. Such a scheme would necessitate only a comparatively small area being devoted to sports, and the rest of the property could be developed as a much needed city park for the residents of West Brantford.

Until the time when such action is made possible by the city, the trotting track, grand stand, and ball field must remain, but work of boundary planting can be commenced, anticipating a permanent layout.

#### (h) Waterworks Park.

In Waterworks Property, the city has the finest opportunity for a city park. Preparations for its development should be immediately commenced, allocating different areas for sports, including trotting track, ball fields, etc. The area is sufficiently large between the canal and the river to permit of effective tree massing with extensive open spaces and vistas on a large scale. Canalside and riverside drives should be planned, with intercommunication carefully screened by heavy mass planting. The planting of trees in rows on either side of curving drives is unsuited to a large level area of this sort. The area controlled by the Waterworks Board lying north of the canal will be dealt with later on.

26

#### (i) Bell Homestead Park.

The Bell Homestead forms an admirable stopping-off place for people walking or driving round the Tutela Heights route. As the interest is largely historic every effort should be made to preserve intact, as far as possible, all the surroundings which commemorate the invention of the telephone. In European countries, where the glamour of tradition controls the town-planner at every point, one of his most difficult problems is to combine the efficiency required of modern civic problems with respect for the past. In Canada these opportunities for the preservation of historic monuments are so seldom found, that the reasons for their preservation become all the greater when the opportunities do occur.

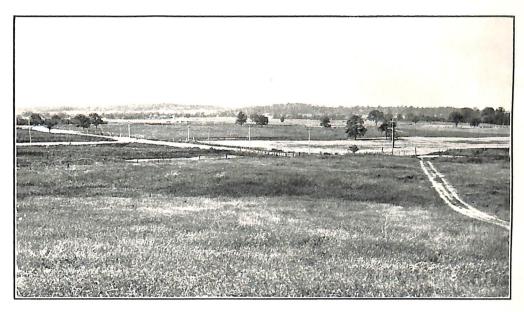
Any changes contemplated then for the Bell Homestead should be strictly preservative in character if the interest connected with the farm is to be preserved. The house should, of course, remain intact together with the rather quaint hedged approach and the orchard where much of Bell's work was done. Provision must be made therefore for the large number of people who come to view the birthplace of the Bell Telephone. On the north side a suitable terrace, overlooking the river below, should be constructed and perhaps partially covered so that visitors may take refreshments amid pleasant surroundings. Paths leading down to the river below should be constructed so that visitors can take advantage of the wooded banks and lower flats for strolling about.

#### (j) Ontario School for the Blind.

Brantford, already rich in park spaces, is particularly fortunate in having the grounds of the Ontario School for the Blind at her disposal for park purposes. These grounds have been heavily planted with a uniform dense growth of trees of various sorts. While an area of this kind surrounding a group of buildings is better wholly covered with trees than left perfectly bare, one might travel far before discovering a better example of the need for mass planting than the grounds of the Ontario School for the Blind. A plan should be at once prepared showing a definite relation between areas of mass planting and open spaces. By skilful treatment these grounds might quickly be made a most beautiful park.

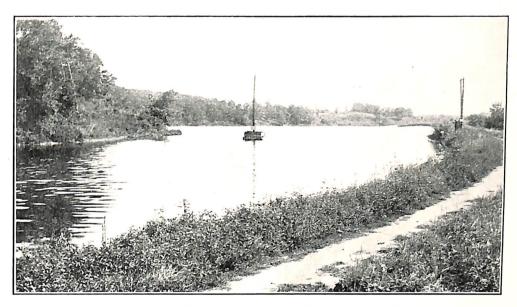
#### (k) Mohawk Park.

While the Waterworks property and the Ontario School for the Blind serve the west end of the city very well with parks, the east end is already somewhat neglected and seems likely to become more so, as the principal direction of civic growth seems to be toward the east. The acquisition of Mohawk Park is



11. View overlooking Waterworks Property. "A fine opportunity for a large City Park."

See Page 26.



12. View of Mohawk Park as seen from the Canal and Mohawk Lake. See Page 27.

essential if the growing needs of this end of the city are to receive recognition. Mohawk Park is particularly favorably placed as a city park for the east end. Having direct connection with Colborne Street and leading down to the canal basin this stretch of woodland, already beautified by nature's hand, is admirably suited to purposes of rest and recreation. This land should be acquired for the people at as early a date as possible.

#### (1) Other Parks.

With both the east and west ends of the city well served with parks we have still to consider the north which has been developing quite rapidly of recent years. The distance from the north end of the city to any of the above mentioned parks is considerable, and the city should now be on the lookout for areas which could later on be developed as parks to serve this growing district.

As has been pointed out earlier on in the report, the range of hills surrounding the city should be made use of and kept open, in places, for the use of the public as has been done at the Bell Homestead, which should serve as an example showing the value to the public of the natural overlooks with which the city is surrounded. On Terrace Hill several sites are to be found, any one of which could be obtained at a very reasonable price, where a shelter and overlook might be erected in which people could sit and enjoy the spendid view over the city. A strip should be obtained with a frontage on Terrace Hill Street reaching down as near as possible to the foot of the hill so that the benefit of a hill-side park may be obtained. The hillside, which is of comparatively little value for building purposes, would develop into a splendid park.

Further along to the north above West Street the hillside is broken by two or three ravines. One at least of these open valleys should be obtained as they are of little value from the builder's standpoint and would develop into most admirable parks. As stated above, the north end of the city is likely to be very short of parks in the future as further development takes place in this direction. Sooner or later the necessity for a park in the north end is certain. We would strongly urge the acquisition of park spaces at this time while land is comparatively cheap.

#### 2. PARKWAYS.

#### The Grand River and the Canal.

Parkways should always be arranged in such a manner as not to invite too much through traffic. Their purpose is essentially

that of a park as distinct from a thoroughfare. The one provides rest and recreation for the city dweller, the other the means of carrying on the activities of city life. The purpose of parkways is to provide pleasant walks or drives within easy access of all the citizens.

In Brantford, parkways should be confined chiefly to the banks of the Grand River and the canal. Some excellent opportunities for parkways will be found along the crest of the hills surrounding the city, but this should receive consideration only after the preservation and development of the river banks has been assured. No feature of civic development has been more overlooked or more abused in this country than the treatment of water.

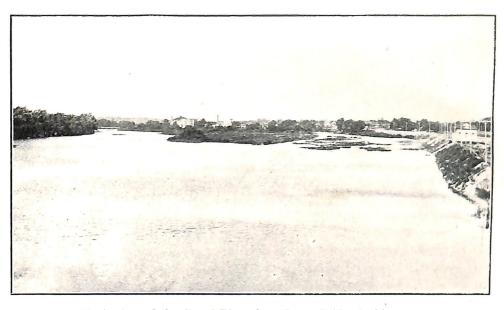
Almost universally in English speaking cities we find water fronts and river banks left over to private development. The consequence has been that, instead of recognizing in these natural features the greatest asset of civic beauty, health, and wealth, the city, by turning its back upon them and allowing garbage and refuse to accumulate, has converted them into evil smelling and unsightly areas which must be screened as far as possible from the public view. Although matters have not reached this stage in Brantford as yet, all the elements are to be found in the city which, under greater density of population, would produce these conditions. Only at one point in the city is anything in the nature of a view of the Grand River to be obtained; viz, at Lorne Bridge. Apart from this, one might spend a considerable time in the city without discovering that Brantford possesses so noble a stream.

The obvious and logical method of opening up the river to the public is the construction along its banks of parkways. Here is Brantford's greatest opportunity to step in and control the development of its principal asset. With the sub-division of any area abutting on either river or canal, all banks, like all street areas, should be donated to the city.

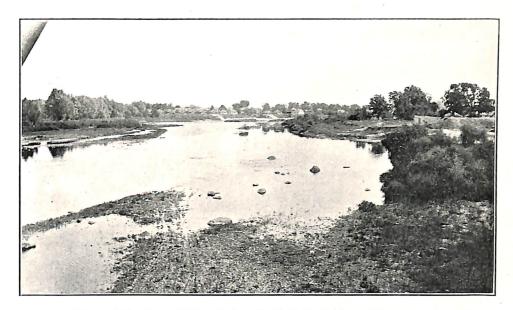
Having obtained control of one bank, it logically follows that the city must obtain possession of the opposite bank. If it were to remain under private control, the city's development on the one bank would be rendered valueless by the unsightliness of the other.

Throughout the civilized world we see an organized effort on foot, on the part of cities, to win back for themselves the birthright with which nature has endowed them but which they have so carelessly thrown away.

In London, a magnificent start has been made in the new embankment toward the reclamation of the River Thames. Several



13. A view of the Grand River from Lorne Bridge looking west. See Page 29.



14. View of the Grand River below T. H. & B. Bridge. The encroachment of the city is here plainly seen in the distance. The ultimate destruction of these beautiful banks, unless steps are immediately taken to prevent it, is inevitable.

See Page 29.

South American cities have already developed their water fronts. Chicago is now spending millions in an effort to reclaim its water front, while almost all continental cities, so far ahead of us in these matters, have developed these features to the utmost possible extent. In Canada, we have the city of Toronto, with almost the whole of its water front now in the control of the Harbour Commission. The city of Saskatoon, one of the very youngest in Canada, has now acquired a large part of both banks of the Saskatchewan River and has promoted a definite policy for the final acquisition of the whole.

Cities have failed to realize in the past that the policy of allowing water features to become unsightly and unsanitary eyesores is not only shortsighted, when viewed from the standpoint of public health and happiness, but also constitutes a serious, direct economic waste. The banks of rivers under private control are of little value, while, when developed and drawn together by the city into one unified scheme, the surrounding property frequently reaches a market value almost as high as any property in the city. The farsighted policy for Brantford would be to acquire the river banks under excess condemnation proceedings, taking more land than was actually required for the proposed development, and receiving the benefit of the unearned increment by selling off the balance at enhanced prices after the development had been realized.

#### Definite Proposals for Parkways.

Owing to the heavy floods which usually sweep down the Grand River each spring, high dikes are necessary on each side of the river in order to protect low-lying lands from flooding. This gives an admirable excuse for riverside parkways. On the south bank of the river at Lorne Bridge, the city already owns a considerable stretch of bank both east and west. On the east, the existing dike already runs as far as the western boundary of Agricultural Park. This dike should be continued west up stream to connect with Burford Road. In this, as in other cases where the river skirts low-lying land, the property owners should be asked to donate to the city a strip wider than the standard 66 feet, in return for which the city would agree to erect the dike, and so make available the low lying land. As the parkway on the top of the dike should in no case be ultimately less than 60 feet wide if it is in any way to serve its purpose, and, as the two banks together would take up approximately 56 feet, it follows that a strip at least 120 feet wide must be secured. As the expense of constructing so wide a dike would be very great, the city could, in the meantime, fulfil its obligations by constructing a somewhat narrower dike for the time being, but sufficient land to allow of parkway being ultimately constructed should be acquired. This parkway should extend, partly by way of the Burford Road, as far up stream as Holmedale, where a new bridge has been suggested.

The north-east bank of the stream above Lorne Bridge is very happily situated, as a large section is under control of the waterworks board. Any scheme for the development of the waterworks property as a park would naturally take the fullest possible advantage of the river frontage, and also comprise the development of both banks of the power canal from Holmedale to the factories. Kerby Island should, of course, be obtained as a central park for the city, round which a parkway could be run connecting with West Mill Street. From the point where West Mill Street joins the canal, a parkway drive should be run up both sides of the canal as far as Holmedale, crossing the tracks of the L. E. & N. just below the Holmedale dam. As the L. E. & N. have appropriated the river bank beyond this point, the parkway must keep inside the railway and follow on as far as the Stratford Estate, where a small ravine permits of an easy connection out into the Paris Road.

Beyond the Stratford Estate the bank above the railway is so badly cut up with ravines that the construction of a parkway drive would be very costly, necessitating several bridges. The possibilty of the continuation of this parkway should, however, certainly receive serious consideration. The scenic beauties of this part of the river are by far the finest in the neighbourhood of Brantford. They should certainly be made accessible to the general public. Property owners would undoubtedly be willing to donate sufficient land for a parkway to act as a foil between their property and the railway. No opportunity of obtaining land for this improvement should be let slip.

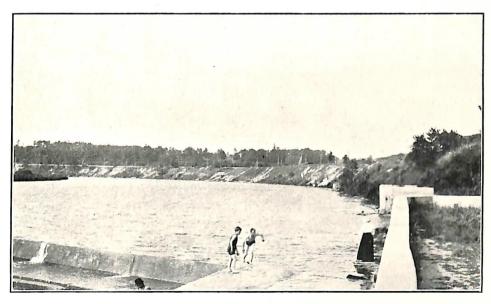
South of Lorne Bridge, the river bank is owned by the city as far as the T. H. & B. Bridge, giving a fine start for another parkway which should ultimately extend as far as the Bell Homestead Park. As the northern bank, south of Lorne Bridge, is now in the hands of the L. E. & N. no parkway is practicable, but steps should be taken at once to prevent this bank from becoming unsightly. Undoubtedly co-operation with the Railway Company would succeed in preserving and enhancing the beauty of this bank.

Owing to the large sweep the river takes from the proposed bridge at Strathcona Avenue round to the Hamilton Road, a very large area of low lying flats are enclosed. As the reclamation



15. View of Canal west of Mohawk Park. Both these beautiful banks should be secured by the city as public parkways.

See Page 32.



16. View of Grand River above Holmedale Dam. See Page 29.

of these flats will be necessitated by the demand for factory sites, it follows that the whole of the enclosing bank will ultimately have to be diked, giving an opportunity for a magnificent circumferential parkway sweeping nearly halfway round the entire city.

In addition to the river, the canal possesses in some respects unrivaled opportunities for civic beautification. It fortunately happens that the city owns as streets a very considerable portion of both banks of the canal.

The need for a new traffic connection between Clarence Street and the foot of Alfred Street has already been pointed out. This connection, if carried out as shown on plan, would make possible the reclamation of the swampy flats lying in the angle between Colborne and Alfred Streets. On account of the immediate need, already mentioned, for a bridge connecting Clarence Street with Newport Street this work should be pushed through at once. The new street following for some distance the tracks of the Brantford and Hamilton Electric line, should curve off in a northerly direction to connect with the foot of Clarence Street. On the southwest side, next the canal, the reclaimed land should be developed as a park.

The large amount of land made available for building should in this case be sufficient to pay for the improvement.

The south bank of the canal from the foot of Alfred Street to Lorne Bridge is already owned by the city and could be made most attractive by the planting of trees and shrubbery.

From the foot of Alfred Street east, the north bank of the canal should be developed as a fine parkway extending to Mohawk Park and beyond to the Hamilton Road, thus giving an attractive approach to this popular pleasure resort. The south bank of the canal is already owned by the city almost as far as Mohawk Lake. This road should be developed as a parkway and continued as far as the river. Some idea of the existing beauty of parts of this canal can be obtained from illustrations.

### 3. PLAYGROUNDS AND RECREATION CENTRES.

More important perhaps, in some respects, than even parks and parkways, already discussed, are recreation centres and playgrounds. While the former serve the general public for pleasure and for beauty they are too far away from many homes to serve the needs of the children. The yards in connection with the schools will serve to some extent.

### (a) Statistics of Playground Space at Schools.

Schools	Space-sq. ft.	Registration	Sq. feet per child
Central	48,430	752	64.4
Alexandra	25,794	588	42.3
Victoria	24,800	386	64.2
King Edward	10,635	618	17.2
Ryerson	6,346	297	21.3
Dufferin	73,875	429	172.2
Total	189,880	3070	61.8

From this table it will be seen that the average yard space in connection with Brantford schools works out at 61.8 square feet per child. Two schools, however, viz: King Edward and Ryerson possess an average of only 17.2 and 21.3 respectively, a much smaller area than is usually considered necessary. In crowded London where space is so valuable the minimum of yard space necessary is 30 square feet per child. In Brantford the allowance ought to be far more liberal.

It has been found in other cities that a playground will not serve an area having a greater radius than half a mile surrounding that particular playground. As children are unable to walk more than half a mile to their play, the playgrounds must not be further apart than one mile in order to serve every home. It is extremely doubtful if mothers and babies could walk as far as half a mile to a playground.

While a large number of small playgrounds scattered about through the city at short distances from one another are necessary for the sake of accessibility, it must be distinctly borne in mind that a small number of large and well organized playgrounds are much more economical to run than a large number of small ones. A playground in order to be of any real service to the city must necessarily be superintended as, if left without supervision, they are apt to become a general nuisance and to do more harm than good. It therefore become obvious that a playground, if it is to be economically run, must be large enough, and developed with sufficient intensity, to demand the continuous attention of a superintendent. Playgrounds, therefore, for small children, should be placed, wherever possible, in connection with a school where they can be sufficiently supervised. The older boys and girls, however, need something more than a mere children's playground. In Chicago, where this whole question has received more attention than in any other city in the world, it has been found that the most economical method of handling the problem is the construction of what are known as recreation centres comprising



17. Victoria Square. The trees in this Park are much too thick. See Page 23.



18. Alexandra Square. A Forest. See Page 26.

a considerable area, not usually less than 20 acres and sometimes more. These "Centres" are developed in the most intensive manner with a fieldhouse including concert hall, library, etc., gymnasia, and swimming pools, both indoor, and outdoor, for both sexes. In addition to these there would be a running track, a baseball and footfall field, and tennis courts for older people. An area of twenty acres would comprise at least six whole blocks in a city like Brantford. The area to be chosen should of course be as level as possible.

These centres should be located within one mile of every home, so that in Brantford the minimum requirement would be one in the north located perhaps in connection with a park already proposed in this vicinity, one in the west in connection with Waterworks Park, one south of the river where Tutela Park can be made to serve the requirements of this section for a time, and one in the east located perhaps on part of the Glebe property. the cost of equipping such centres would be very great, it is not proposed that the city should completely develop all or even any of them at this time. For the present a certain amount of development is all that the finances will permit of, indeed it is doubtful if the population of Brantford is as yet sufficiently dense to excuse a very intensive type of development. In any case the different classes of visitors must be strictly segregated. Young children should not be permitted to mix with the play of the older children. It is a great advantage, where possible, to place the recreation centre in connection with a park so that those who come with little children can leave them for a time in the care of the instructor or caretaker while they themselves make use of the park while waiting.

Playgrounds and recreation centres are not usually objects of great beauty. Unless adequate care is given to up-keep, they are very apt to degenerate into barren wastes devoid of grass, trees, or shrubbery. For this reason they should not be given too prominent a position. In the city a site off the main streets should be chosen if possible, while in the park the playground should not be given too prominent a position.

## (b) Iroquois Playground (Area 2 Acres)

Iroquois Playground is located in the north-eastern section of the city. It consists of one city block. It may be considered perhaps as one of the most typical playground areas, pure and simple, to be found in the city. The development should be a gradual process. The density of population in this district is not at present sufficient to warrant the expenditure of much money,

but, as the playground is at present nothing but a barren waste, some preliminary steps must be taken. As soon as money will run to it the whole area should be fenced in. Later the various sections of playground activity must be segregated.

In the meantime some preliminary planting is essential. It should be confined to good sized boundary beds filled with shrubbery and some trees at the corners. The beds should extend partway along the boundary towards the centre. In order to protect the young shrubbery, temporary fencing must be used.

### (c) Tutela (Area 4 Acres)

Tutela Park, essentially a playground, probably receives as much general use for purposes of recreation as any park in the city. It is encircled to the north and east by a steep bank which will make possible a very individual treatment. Of all Brantford's playgrounds Tutela is the most ready for immediate development. A very strong effort should be made by the Park's Commission to obtain sufficient money for a preliminary development. As soon as this can be accomplished, a carefully worked out plan for immediate development, permitting of further elaboration, should be put in hand. Considerable shrub planting along the Erie Avenue frontage should be commenced at once so as to help to partially screen the playground. Parts of the bank should also be planted at once, trees should be abundantly used on the upper levels so as to screen out the rather unsightly houses behind.

# (d) West Street Playground (Area 2.75 Acres)

West Street Playground resembles quite closely Iroquois Playground as regards both existing natural features and the amount of use to which it is to be put. Remarks made about the one are equally applicable to the other.

# (e) Morrell Street Playground (Area 5 Acres)

Morrell Street Playground is situated on part of the large waterworks property. Owing to the large open spaces in this vicinity it is unlikely that the children of the immediate neighbourhood would use this playground very largely even if developed. The time will come, however, when this playground will be found invaluable. Some boundary planting should be started.

# (f) St. Paul's Avenue Playground (Area 4 Acres)

St. Paul's Avenue Playground is situated quite close to Morrell Street Playground and strongly resembles it in some respects.

value, when measured by the health and general well-being of the citizens at large, is very great. No one would, for one moment, dispute the fact that fine street trees enhance the value of the real estate fronting on to the street upon which they grow. Some idea of the value of such trees would be secured if a telephone company, for instance, were to propose to remove all the trees on a certain street and suggest monetary compensation to abutting owners for such depredation. It is doubtful if an offer of \$100 for each tree would be accepted.

When figured on this basis, it immediately becomes obvious that the capital investment of the city of Brantford, in shade trees is already very great, and when, moreover, we remember that by neglect, a very large proportion of this capital investment may be almost wholly lost, it becomes obvious that a small amount of money spent yearly by the city on maintenance and additional plantations would, in a very short time, repay the citizens many times over.

In many American cities a special shade tree commission has been appointed with complete control over all shade trees and parking strips. Such commissions have power to assess the cost of tree-planting on streets as a local improvement tax against abutting frontage. For maintenance, however, special provision is made in the city budget involving an appropriation which does not usually exceed one tenth of one mill. Such a system should be immediately inaugurated in Brantford. In this case it is probable that no special commission would be needed as the whole matter could be dealt with quite as well, if not better, by the existing Park's Commission.

As regards the kinds of street trees suitable for planting, the number may be reduced to five or at most six varieties. For street work there is no tree to compare with the American Elm. Its habit, comparatively rapid growth, and immunity from disease, immediately marks it out as a perfect shade tree. After the American Elm comes the Norway Maple on account of its compact and globular shape. Both the Red Oak and the Pin Oak make excellent trees for street work, being strikingly distinct in habit and fairly quick growers. For places in the city where smoke and gases kill almost any other tree, the Oriental Plane will be found to thrive, while the Chinese Tree of Heaven is probably the best smoke-resisting tree known.

## (c) THE MARKET

At the outset of this report we state that "Brantford is now in a transitional stage changing from the quiet market town of yesterday into the highly organized, commercial and manufacturing The fact that part of this playground is now being used as a tennis and bowling club proves in some measure that the density of population at this point is not yet sufficient to necessitate a playground for the children of working people.

### 4. SHADE TREES.

The city of Brantford is, on the whole, well supplied with shade Whether this is attributable to any systematic care in recent years, or to the foresight of public spirited citizens in the past, or to accidental occurrence, is a somewhat doubtful point. Brantford possesses, in Chatham Street, what may be considered one of the finest avenues of American Elms to be seen on this continent. This of itself should prove, and undoubtedly has proved, an inspiration to every citizen as an example of what may be accomplished by foresight and care. The fact that a well organized effort, under the able control of the Park's Commission, has been on foot now for the last two or three years, shows how much the value of beautiful shade trees is appreciated by the city. This control, however, applies at present only to the planting of trees on certain streets. There is no general control over the shade trees of Brantford, as a short walk on almost any residential street in the city will show. Lack of control is everywhere manifest both as to planting and maintenance. No uniformity has been accomplished either in spacing, size of trees, or varieties. On most streets the trees are far too close together. Really good trees are being seriously damaged by the close proximity of poor specimens which, valueless themselves, are simply destroying their neighbours.

The fact that street trees are usually growing under wholly unnatural and artificial surroundings necessitates most unusual care in their treatment. With their roots surrounded by paving, through which air cannot penetrate, and from which the sun's rays are radiated, the vitality of the trees is quickly lowered and they become subject to the inroads of disease. Street trees, therefore, must be well planted with an abundance of good soil and manure on which to feed. They must be allowed plenty of room to develop without interference by other trees, wires, poles, etc., and finally, they must be well cared for. The trunks must be well protected by guards from attack by horses and careless persons. They must be kept well watered and pruned and all wounds of whatever nature must receive immediate attention before fungus diseases have a chance to enter.

The actual monetary value of shade trees to such a city as Brantford is a difficult quantity to estimate. While the actual value of the trees as standing lumber may be very small, their



19. The Grand Trunk Railway Station and its surroundings. See Page 23.

centre of to-morrow." The fact that the city is destined to lose its character as a quiet market town does not mean that it will not in future have a market, or even that the market will not be the principal exchange between producers and consumers. At the present time the market in Brantford is the principal feature of the city, at least from the economic standpoint. Brantford's market enjoys the well earned pride of its citizens and the envy of surrounding municipalities. In our opinion the successful preservation and development of the market will form one of the principal underlying secrets of Brantford's future commercial success. A successful market, such as Brantford possesses, helps the city in two ways. In the first place it cheapens the cost of living, thereby making the city a more popular centre in which to live, and creates a happier, more contented, and more plentiful labour market, a great consideration from the stand-point of the manufacurer. In the second place it helps the farmer and encourages the development of an agricultural belt of intensive husbandry surrounding the city thereby encouraging retail trade in the city itself.

Apart then altogether from the question of where the market ought to be placed everybody will agree that the market is a feature which should be encouraged and developed.

One of the principal reasons for the development and phenominal success of Brantford's market has undoubtedly been its location. Situated as it is at the crossing of the two main thoroughfares in the city, it has developed the natural business centre. Its success has been due not so much to the close proximity of Brantford's principal shops as has the success of the shops been due to the market.

What results might be expected from the removal of the market from its present site are extremely difficult to forecast. Sufficient has been said to show that such a step would undoubtedly involve the upheaval of one of the most deeply seated economic forces in the city. Of the numerous other sites proposed for the market, that forming the block surrounded by Clarence, Darling, Charlotte, and Dalhousie Streets, seems to be the only one which would have any chance of success as a popular market. outcome of a move even to so central a site as this is extremely doubtful. The claim that the market would undoubtedly give rise to a prosperous shopping district in this vicinity is open to argument, as the low lying nature of the site, and the proximity of the railway on Clarence Street, make this vicinity unsuitable as a shopping district or even for the attendance of large crowds of people.

Attendance at a market is largely a question of habit, and a custom of this sort once broken would be most difficult to revive. Experience has shown time and again that economic forces can not be controlled at the whim of the townplanner. They must be accepted and allowed to develop along their own lines. We are very strongly of the opinion that the market at Brantford, as an institution, has centred around the present market square for so long, and has become so interwoven with the civic life of the community, that its uprooting at this time would seriously endanger its extinction.

The principal reason now put forward for the removal of the market is the unsightliness of the square on Saturdays. There is the very reasonable argument that, at the crossing of Market and Colborne Streets, a concourse or traffic centre will in time be needed. In addition to this, it is felt that a market square at this point is not in keeping with the dignity of a city like Brantford. Some citizens see visions of statues and splashing fountains. Others see in this square a cheap site for the new city hall. The construction of a new city hall on this site would, in our opinion, be a fatal mistake as the open square would then be lost for all time. Open squares of this sort in the centre of a town are so rare an occurrence and of such priceless benefit to the city, especially when it grows large, that the destruction of the square would constitute nothing short of a civic calamity. We see no reason whatever why the market should constitute an eyesore. On the other hand a market properly organized and well arranged, should prove a most attractive feature. Special provision should be made on another site, perhaps the one above mentioned, or the block immediately east of it across Clarence Street, for the hay and grain market, which cause at present considerable congestion and overcrowding of the present market. features removed the square should provide sufficient accommodation, if properly organized, for many years to come. Ample sheds of attractive design, preferably with stout oak piers and brackets, should be erected round the outside; at all events on Market and Colborne Streets; set well back from the sidewalk so as to allow of plenty of room for circulation for the crowds without interfering with traffic. As a central feature on Colborne Street, a market building of a more substantial and permanent character would be needed for the sale of meat and more perishable foodstuffs. The central area should be kept open as an outdoor market.

The advantages of such an arrangement would be numerous. All danger of damage to the market as an economic factor would

order to obtain anything like the return on his money which is usually demanded by the Canadian investor, the speculative builder cannot afford to put up cottages which are to let at rentals within the means of the working man. If a five roomed cottage can be built at a cost of \$1,500, it follows that the house can not be let at less than \$15.00 per month in order to allow the investor a return of only 10 per cent. gross on his outlay. No investor expecting any reasonable profit would be satisfied with so low a return, with depreciation and taxes to pay. On the other hand the working man, earning from \$10 to \$15 per week, cannot possibly afford to pay out more than one quarter of his income in rent. The result is that while a few house owners are willing to accept a moderate rental, which pays perhaps as low as five per cent. interest on the investment for a time while waiting to sell the house, the majority of houses which are to be had do not fulfil the requirements of health and decency. An attempt at solving this problem of supplying houses at reasonable rents has already been undertaken in Toronto by a public service organization known as the "Toronto Housing Co." With bonds guaranteed by the City of Toronto under a special act of the Provincial Legislature, the Company has persuaded that section of the public which is interested in better housing to take up the 5 per cent. bonds with a view to supplying healthful living conditions for the working classes. Some \$500,000 is now being spent on the construction of several blocks of model workingmen's dwellings, ranging from two to six rooms each and renting at from \$10 to \$25 per month. Central heating, bathrooms, abundance of the state of the dance of light and air, playgrounds and every amenity has been provided, while the property is situated within one mile of the centre of the city. The whole has been carefully worked out as a business undertaking, paying 5 per cent. on the bonds after making all allowances for depreciation, taxes, and contingencies. With the successful outcome of this preliminary venture, which is already assured, the Company proposes to launch out on a much larger scale and build a workingmens' model village on the outskirts of the city which will undoubtedly stand as an example for the rest of Canada.

If the question of housing is to be successfully grappled with in this country it will have to be undertaken more or less on a public service basis. The whole problem is one of such vital importance to the development of the country as a whole that the state should undoubtedly step in and lend its assistance in the way of cheap capital.

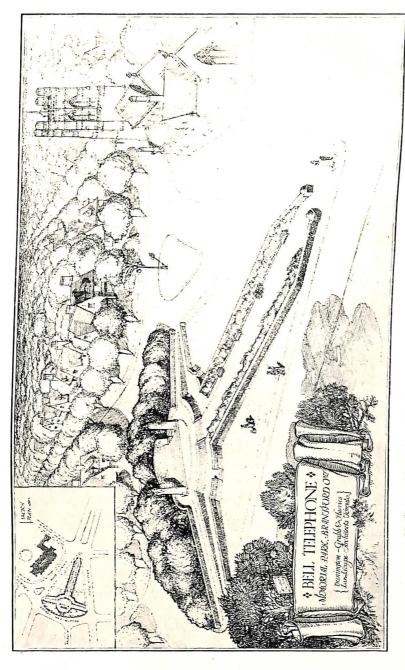
In Brantford a step should be made in this direction in the very near future. While the better class mechanics are at present

be avoided. The square would retain its present character as a public open space while the market, if well designed and well organized, would add very greatly to the individual character and attractiveness of the whole city.

### (d) HOUSING

Brantford is not as yet seriously confronted with the housing problem and the question of overcrowding. These problems arrive at a later stage in a city's development than that which Brantford has reached at present. Prevention, however, is better than cure, and much can be done at this time to prevent the development of slums in the future, when there will be a tendency in certain sections for great density of population to develop. The principal primary cause of overcrowding and the development of the insanitary slum is the very deep lot. Unless by-laws can be enacted strictly limiting in certain districts the percentage of area of lot which may be covered by buildings, the development of inner courts and rear tenements on these deep lots will be inevitable. If these features can be prevented the problem of overcrowding and slumdom becomes comparatively simple. / In those numerous blocks (in the north end especially,) which have already been laid out with very deep lots, the problem of inner courts and rear tenements has not yet arisen. For these blocks it will be time enough to act when the problem shows signs of arising. In many cases it will be possible for the city to compel new streets to be cut through these blocks when the necessity for a denser population arises. In the meantime the Plan Commission. which we are proposing later on in this report, should receive power from the Provincial Legislature to control the development of outlying sections, and regulate according to districts the depth at which lots may be planned. Lots of 100 to 120 feet depth are plenty deep enough for working class houses, while with bylaws enacted in the future prohibiting the buildings from covering more than two-thirds of the lot area, it should be possible to strictly regulate the light and air space necessary for each dwelling.

In Canada the working man, more often than not, owns his own house. This is due partly to thrifty habits and a spirit of independence, and partly to the difficulty of obtaining decent housing accommodation at a moderate rental. We consider this question of sanitary wholesome houses, for the working classes of this country, to be one of the most vital problems with which we are confronted. At the present time it is almost impossible for a working man, with a family, to obtain housing accommodation within his means which will satisfy the most moderate demands of decency, health, and comfort. The fact of the matter is, that in



20. Perspective view showing proposed gardens surrounding the Bell Tele-phone Memorial Monument. See Page 24.

fairly well housed in their own homes, there are thousands of factory operatives, whose incomes do not exceed \$10 per week, who would benefit enormously from such assistance.

The northern section of the Waterworks property would make an admirable site on which to commence operations. Both this section and the Glebe property are undoubtedly destined to become residential areas for Brantford's rapidly increasing population of factory operatives.

## (e) METHODS OF PROCEDURE

In conclusion some definite proposals must be made as to methods of procedure.

The principal reason why town planning control is so exceedingly difficult to exercise in this coutry is the lack of a permanent body, specially appointed and armed with adequate powers, for the purpose of pushing through some definite policy. Owing to the temporary nature of the appointment of city councils, any policy adopted by one council might easily be reversed at a later date. The all important consideration in town planning is continuity of purpose.

The first step in the prosecution of town planning work is to convince the bulk of thoughtful citizens that town planning in its broadest sense is worth while; that it aims, first, at the betterment of social and living conditions of the citizen individually, and second, at the economy and efficiency of the civic machine, resulting in greater prosperity and general welfare.

It is to be hoped that the publication of this report, together with the town planning lectures which have been delivered in Brantford by various speakers, will do something towards paving the way for the accomplishment of this initial step.

Having once aroused interest among the citizens and a desire to see steps taken, the city council should immediately appoint a commission, whose chairman would possibly be the mayor, and whose other members would consist of one or more of the permanent civic officials, together with two citizens not otherwise connected with the city's government.

An act of parliament should be applied for, giving this commission, if possible, jurisdiction over the location of all streets, bridges, parks, etc., in the city, and, within a certain specified radius, outside the city limits.

Should the provincial legislature not feel justified in granting such sweeping powers, an act placing Brantford's development in the hands of the Railway Commission should be sought. The Railway Commission already possesses control over the outlying development of all cities exceeding 100,000 in population. The recommendations of the Brantford Plan Commission would in any case carry great weight in any decision of the Railway Commission.

Should the proposed town planning bill, brought forward at the National City Planning Conference held in Toronto last May, receive the sanction of the Ontario Government, the question of adequate legal powers would be solved.

The first purpose of the Plan Commission would be to prepare an official plan of the city of Brantford showing all streets, street widening, parks, parkways, bridges, etc., existing and proposed.

All subdivision plans to be filed for registration would have to conform to the official plan while no damages could be claimed for structures contravening the plan if erected after it received the sanction of the government.

Provision for amendments and additions to the plan, would, in any case, have to be allowed for.

The work above outlined deals only with precautionary measures controlling the city's future development, with a view to the avoidance of the multiplication in the future of those errors in planning which have in the past produced our existing problems.

The expenses connected with this work are confined to the expenses of the Commission, the preparation of an accurate survey, and the permanent work on the official plan. Such expenses could be amply provided for by a special annual appropriation in the city budget.

Town planning, however, must go further than this. It must aim, as has been shown in this report, at remedial methods for past mistakes, such as the widening of existing thoroughfares, new arterial connections, new parks and parkways, etc.

There are many methods in vogue at the present time for the financing of civic improvements. Three of them may be enumerated as follows:—(1) General Assessment. (2) Special Assessment. (3) Excess Condemnation.

#### [COPY]

#### COMMISSION OF CONSERVATION

OTTAWA, Canada, Nov. 10, 1914.

Dear Sir:

I thank you for letting me see a proof of your report on the City of Brantford, and am glad of an opportunity of making some comments upon it. My brief visit to Brantford in May last enabled me to appreciate its fine natural position and the great opportunities that existed for its improvement.

I think the citizens of Brantford ought to be congratulated on their enterprise and public spirit in having a scheme prepared for the future development of the city, and I am glad to note that you have endeavored to deal with the matter on practical lines. I am not sufficiently acquainted with the local conditions to enable me to criticise the details of the report, but, so far as the broad principles that underlie your proposal are concerned, I think you are giving sound advice to those for whom it is intended.

It is unfortunate that such a report has to be prepared without the city of Brantford having sufficient legal powers to put it into effect by co-operative action between the owners of the land and themselves, but it may be hoped that many of the suggestions can be carried out by voluntary co-operation between both parties, without the assistance of legislation. To accomplish this only requires a certain amount of "give and take" on the part of all who are interested, coupled with the recognition of the fact that the future prosperity of the city will depend, to a large extent, on carrying out a proper plan for its development.

It is one of the commendable features of your suggestions that, while they together form a fairly complete scheme for a city plan, some of them can be carried out as complete improvements in themselves. The purchase or earmarking of land for such things as the station square, the Park system and the extensions of the main thoroughfares are urgent, and preliminary steps should be taken with regard to them before further development creates greater difficulties and increases the cost. I think there can be no question that the City Parks of Brantford should be laid out chiefly on the banks of the Grand River and the canal, and these should be linked up, by parkways, with natural parks formed on the hills surrounding the city.

With regard to housing, I can hardly believe that there is not already a housing problem in Brantford, but I do not mean by this that there is over-crowding. The position in Canada generally with regard to the housing of the working classes is a somewhat serious one in view of the high proportion of wages which has to be paid in rent, or in lieu of rent, for accommodation

- 1. Large improvements such as water and sewage works are paid for by an appropriation each year from the general assessment to the sinking fund.
- 2. Street paving and sidewalks are paid for by a special tax against the abutting frontage.
- 3. Large reconstructional schemes such as street widenings, new streets cut through built-up sections, etc., are often paid for by the system of excess condemnation.

The principal assumption of both these latter schemes is that increased land values arising from an improvement ought to be made to pay the cost of that improvement.

The system of special assessments seeks to tax all adjacent property likely to be benefited to a sufficient extent to pay for the improvement. In Kansas City, the cost of land purchase, construction, and maintenance of many parks and boulevards, has been successfully paid for entirely by a special tax on adjacent property, so greatly has the value of surrounding property been increased. This principle is well suited to many of Brantford's problems.

The principle of excess condemnation usually requires much capital for the initial purchase of more land than is required for the improvement. By this means the city, commission, or private corporation, as the case may be, hopes to sell the remaining property after the completion of the improvement for a sufficient sum to reimburse it for the whole initial purchase of land and the cost of the improvements.

As an example, our own proposals for a civic centre on West Street admirably illustrate this principle. It has been shewn how, by means of the reconstruction suggestion, the city, after purchasing the blocks of land in question, acquires a large park 500 feet long and has left, after the execution of the improvement, almost as much land as it was originally necessary to buy.

certainly a matter which should be thought of before any considerable expenditure is incurred in connection with the development of main thoroughfares, parks, or a civic centre.

I venture to make one suggestion to the Parks Commission through you, namely, that it would be of great value to themselves and to such bodies as the Commission of Conservation if a careful map were prepared of Brantford and its suburbs as they now are. We suffer in Canada, to some extent, from the absence of proper plans of cities and towns in their present condition, and it would be most useful if the towns would prepare maps which not only show their streets and sub-divisions but also show the actual built-areas, the approximate position of the houses, etc., already erected, the physical characteristics of the ground, the extent to which the railways were cutting in on embankment or on the level, the contours of the land every 25 or 50 feet above sea level, and other existing features such as are to be found on an ordinance survey map in Great Britain. If work has to be found for unemployed during the coming year, I think it would be a great opportunity for preparing such a map, as it would enable assistance to be given to some professional men as well as unskilled laborers, and, at the same time, render useful public service.

Even if the carrying out of your proposals were suspended until the two matters regarding which I have made suggestions have been dealt with, I do not think it would hamper your scheme, while on the other hand a survey of the existing housing conditions and the preparation of a proper map of the city and surroundings would be of great value to those who might be entrusted with the work of carrying out the city plan.

I am, Dear Sir,
Yours faithfully,

(Signed) THOMAS ADAMS, Town Planning Adviser

H. B. Dunington Grubb, Esq., 34 North Street, Toronto, Ont. which is not always of too satisfactory a type. On the whole, it is probably true to say that in the small cities and towns in Canada there is sufficient air space within the homes, and sufficient ground surrounding them. The chief defect in many cases is the inadequacy of the sanitary arrangements and the absence of good road access. How to get these matters improved without putting further burdens on the shoulders of the lowest paid classes of the community is one of the most serious problems which we have to face in Canada. It is our duty, and I think it will be expected of us, that we should try to solve this problem without recourse to philanthropic measures. In this connection it would be most valuable if those who are acquainted with local conditions in such cities as Brantford would make a careful survey of their housing conditions and prepare a statement setting out the facts as they find them and the difficulties they encounter.

I heartily support the general principle that it is essential to have some permanent body created for the purpose of carrying out the development of the town in accordance with whatever definite policy may be agreed upon. It may be difficult to set up such machinery, but only in proportion as it is done will the carrying out of any adopted plan be successful. Many cities have had fine schemes prepared, but the money spent in preparing them has often been entirely wasted because of the absence of machinery to carry them out. Very often the extravagent nature of the schemes themselves has been the cause of their abandonment, but the chief difficulty in most cases has been the absence of any body having powers to do the necessary work.

It is possible that at this critical time, cities like Brantford will have to avoid expenditure on new or extensive schemes of improvement, but many of your suggestions are such as can be carried out, in part at least, at comparatively little cost, and with the prospect of great ultimate benefit to the city. In this connection I think emphasis should be placed on the features of your report which suggest preventive measures, rather than those which involve expense for re-construction.

It would be worth considering whether the time has not arrived for the city of Brantford to exercise some measure of control or to initiate some system by which manufacturing plants could be concentrated in certain portions of the city so as to secure the economical working of these plants on the one hand and the preservation of amenities in the residential areas on the other hand. By this means the great losses, which at present occur to individual owners as the result of the indiscriminate mixing up of factories and houses in some towns, might be avoided. Although it may appear to be early in the day, I do not think it is too early for Brantford to also consider the question of heights of buildings. In regard to both of these matters, that is, (1) the location of factories and (2) the heights of buildings, some consideration should be given to a zone system for the town, even if there are no practical means of carrying it out as a complete policy at present. It is

